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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,780	12/13/2001	William J. Clatanoff	57381US002	7028
7590		03/31/2004	EXAMINER	
Attention: Alan Ball		PERRIN, JOSEPH L		
Office of Intellectual Property Counsel		ART UNIT		
3M Innovative Properties Company		PAPER NUMBER		
P.O. Box 33427		1746		
St. Paul, MN 55133-3427		DATE MAILED: 03/31/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/022,780	CLATANOFF ET AL.	
	Examiner	Art Unit	
	Joseph L. Perrin, Ph.D.	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 17-20 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-16 is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20030224.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-16, in Paper filed 13 February 2004 is acknowledged.
2. Claims 17-20 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper filed 13 February 2004.
3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,814,794 to Sato.

Re claims 1-3, Sato discloses (for instance in Figure 6), a spray device including a fluid reservoir system including a pump (cleaning liquid bag 40 and

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inline pump 55), a nozzle assembly (tip of injector 27) connected to the reservoir system by a cover tube (body of injector 27), and an absorbent (50) to collect waste liquid (see also col. 4, lines 17-22 & 36-43).

It is noted that the recitation "for cleaning at least one optical surface" has not been given significant patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded significant patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Thus, recitation on Sato reads on applicant's claimed invention.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,733,428 to Malinge *et al.* (hereinafter "Malinge") in view of Sato (previously cited).

Re claims 1-2, Malinge discloses a device for spray-cleaning optical surfaces comprising a nozzle assembly (nozzle part 8, Figures 1-2) in combination with a fluid reservoir and pump (construed as a syringe, col. 3, line 5) connected to the nozzle assembly.

Re claims 3-4, Malinge further discloses the nozzle assembly having a cover tube (sleeve 18) coupling the nozzle assembly to the syringe (not shown); and a delivery tube (sleeve 17) inside the cover tube for fluid delivery to the nozzle (see Figures 1-2 and col. 3, lines 12-22).

Re claims 5-7, Malinge further discloses the nozzle assembly having a shroud (jacket 9/21) overlapping the cover tube and containing the nozzle

assembly (see Figures 1-2; col. 2, lines 39-42; and col. 3, lines 24-27); the shroud having a contact seal (neck 24 covering the male tip 22, col. 3, lines 24-27); and the nozzle having a circular orifice (part 8 being a "cylinder", which is construed as circular, see col. 2, line 36).

Re claims 8-9, Malinge further discloses the nozzle assembly including a return channel to remove waste fluid (evacuation orifice 7 to remove the waste fluids, see col. 2, lines 30-35 & col. 2, line 67 – col. 3, line 3).

Although Malinge discloses evacuating the cleaning fluid after the optical surface is cleaned, Malinge does not expressly disclose using an absorbent to collect the waste cleaning fluid.

Sato discloses supplying cleaning liquid to a spray device via a fluid reservoir and pump combination (see previous rejection above) and using an absorbent to collect the waste fluid for easier handling and disposal (see for instance, col. 2, lines 25-26 & col. 4, lines 51-52. Therefore, the position is taken that a person of ordinary skill in the art at the time the invention was made would have been motivated to modify the spray device of Malinge with fluid collecting absorbent, as disclosed by Sato, for the purpose of improving waste cleaning fluid handling and minimizing potential messy clean-up.

Allowable Subject Matter

10. Claims 10-16 are allowed.

11. The following is a statement of reasons for the indication of allowable subject matter: The closest prior art of record, US 4,814,794 to Malinge *et al.*, fails to teach each

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and every limitation of the instant invention. Specifically, the Malinge reference fails to teach or suggest the claimed invention further including an absorbent mounted adjacent the outer wall of the cover tube, which is disclosed as an essential element of claimed invention, as described in independent claims 10 and 15.

Conclusion

12. It is noted that the "X" references cited in the related International Search Report for PCT/US02/32347, namely US 4,733,428 to Malinge *et al.* & WO 9840769 to MINNESOTA MINING & MFG, were not cited as anticipatory references because the references do not expressly disclose an absorbent as claimed by applicant.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

WO 9840769 to MINNESOTA MINING & MFG, which discloses a spray device with fluid reservoir, pump and nozzle assembly;

US 20020162582 to Chu *et al.*, which discloses a fiber optic cleaning spray device with fluid reservoir, pump and nozzle assembly;

US 6,125,227 & US 6,006,768, each to Cox, which discloses a portable fiber optic spray cleaning device with fluid reservoir, pump and nozzle assembly;

US 5,922,141 to Darsey, which discloses a non-contact fiber optic spray cleaning method.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is

(571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571)272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph L. Perrin, Ph.D.
Examiner
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jlp